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Centers for Disease Control and Prevention (CDC) Atlanta GA 30341-3724

Division of Solid & Hazardous Waste
Utah Department of Environmental Quality

Mailstop: F30 (770) 488-4024 Fax: 488-4820 May 18, 2000

Mr. Dennis R. Downs, Director Division of Solid and Hazardous Waste Utah Department of Environmental Quality 288 North 1460 West 4TH Floor Salt Lake City, Utah 84114-4880

Dear Mr. Downs:

The Centers for Disease Control and Prevention (CDC) is directed by Congress to provide public health oversight of Department of Defense's chemical weapons disposal facilities. In this capacity, we were notified on May 9, 2000, about the release of the chemical agent GB on May 8th at the Tooele Chemical Agent Disposal Facility (TOCDF). CDC responded by dispatching a two-person team to begin an independent investigation of the incident. The purpose of this letter is to inform you about the scope of our ongoing investigation and to provide you with our preliminary assessment of the public health implications.

Our investigation will assess the public health risks to both workers at the facility and of residents of the surrounding community. We will review whether there were human or mechanical failures and examine the sequence of events that took place in response to the chemical agent release. This investigation will also focus on agent monitoring systems and examine the concentration of the release at ground level in order to evaluate the potential human exposure risk. Finally, we will provide our recommendations based upon our findings.

We have completed our on-site data collection at TOCDF and are now in the process of analyzing these data. It is difficult to forecast when we will complete the entire report of our findings, but we will make sure that you and your staff have a written copy of it upon completion.

In the interim, we believe that it is very important to provide you with our preliminary assessment of the health risks to the workers at the facility and residents in the surrounding community as a result of this release. It is our opinion that the release resulted in minimal to no exposure, and consequently, no adverse health or medical effects for either the TOCDF workers or the people in the surrounding community. To arrive at this determination, we used the best available data to run a "worst-case EPA- approved air dispersion model," which indicated that this release posed no short- or long-term threat to the health of people living in the vicinity of the

TOCDF. We found that the maximum possible exposure to agent GB at ground level during this incident was under one percent of the Department of Health and Human Services (DHHS) acceptable safe level for such an exposure to the general public.

We also reviewed specific health implications for the site workers during the GB release. Our initial findings indicate that the air-monitoring alarm activation equipment operated in a timely and appropriate manner. The air dispersion model that we used was based on "worst-case parameters," including a meteorologic "downwash" option to determine maximum possible local agent concentrations. An examination of local meteorologic data during the release, suggests that downwash conditions (wind speed and direction conditions that result in very rapid movement of stack gases to ground level near the plant) would not have occurred for any significant duration; however, the option was run to define possible worst-case conditions. This conservative model estimated maximum agent concentrations that were well below the established occupational exposure limits. Considering potential exposure for the entire release period, the maximum possible exposure was again less than one-percent of the safe exposure amount for workers. In actuality, TOCDF workers masked within 5 minutes of the onset of the release; consequently, exposure would have been considerably less than the amount used for this analysis.

We appreciate the help and cooperation that your department has provided CDC during this and other interactions involving review of the chemical demilitarization activities in Utah. We would like to emphasize that as we work to continue our final analysis of this incident, we will alert you as soon as possible should we find new information about health implications for either workers or community residents. We take our oversight role seriously and want to ensure that worker and public health are protected. If you have any questions, please do not hesitate to call us.

Sincerely yours,

Kevin Yeskey, MD

Associate Director for Emergency Public Health & Science Acting Director, Division of Emergency and

Environmental Health Services

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National Center for Environmental Health

cc:

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